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Form Approved
OMB No 0704-0188

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1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 01/93		3. REPORT TYPE AND DATES COVERED POP Test (12/92)	
4. TITLE AND SUBTITLE Performance Oriented Packaging Testing of Container, Shipping and Storage, CNU-536/E for Packing Group II Solid Hazardous Materials				<div style="border: 1px solid black; padding: 5px;"> DISTRIBUTION STATEMENT A Approved for public release Distribution Unlimited </div>	
6. AUTHOR(S) Dennis M. Kotun					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Packaging, Handling, Storage and Transportability Center Naval Weapons Station Earle Colts Neck, NJ 07722-5023				8. PERFORMING ORGANIZATION REPORT NUMBER DODPOPHM/USA/DOD/NADTR92033	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Commander, Naval Air Systems Command (PMA-263) Department of the Navy Washington, DC 20361-8050				10. SPONSORING/MONITORING AGENCY REPORT NUMBER Same as above	
11. SUPPLEMENTARY NOTES N/A					
12a. DISTRIBUTION/AVAILABILITY STATEMENT				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This Performance Oriented Packaging (POP) test was conducted to ascertain whether the CNU-536/E Shipping and Storage Container meets the Packing Group II requirements specified by the Code of Federal Regulations, Title 49 CFR, Parts 107 through 178, dated 31 December 1991. The packaged commodity used for the test was two Tactical Air Launched Decoy (TALD) shapes weighing 363 kg (800 pounds). This represents the current maximum commodity weight. To compensate for future growth variations in commodity and/or packaging, 37 kg (80 pounds) were added. Gross weight of the loaded container was 654 kg (1,440 pounds). The test results indicate that the container has conformed to the POP requirements.					
14. SUBJECT TERMS POP Test of CNU-536/E Shipping and Storage Container				15. NUMBER OF PAGES 7	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UL		

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**PERFORMANCE ORIENTED PACKAGING TESTING
OF
CONTAINER, SHIPPING AND STORAGE, CNU-536/E
FOR PACKING GROUP II SOLID HAZARDOUS MATERIALS**

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January 1993

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Naval Air Systems Command
(Code PMA-263)
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Washington, DC 20361-8050

93-01776



- c. Flat on long side.
- d. Flat on short side.
- e. One corner.

PASS/FAIL

1. Base Level Vibration Test

The criteria for passing the base level vibration test is outlined in Title 49 CFR, Sec. 178.608(c): No test sample should show any deterioration which could adversely affect transportation safety or any distortion liable to reduce packaging strength.

2. Stacking Test

The criteria for passing the stacking test is outlined in Title 49 CFR, Sec. 178.606(d): No test sample may show any deterioration which could adversely affect transportation safety or any distortion likely to reduce its strength, cause instability in stacks of packages, or cause damage to inner packagings likely to reduce safety in transportation.

3. Drop Test

The criteria for passing the drop test is outlined in Title 49 CFR, Sec. 178.603(f): A package is considered to successfully pass the drop tests if for each sample tested, no rupture occurs which would permit spillage of loose explosive substances or articles from the outer packaging.

TEST RESULTS

1. Base Level Vibration Test

Satisfactory.

2. Stacking Test

Satisfactory.

3. Drop Test

Satisfactory.

DISCUSSION

1. Base Level Vibration Test

The input vibration frequency was 3.8 Hz. Immediately after the vibration test was completed, the container was removed from the platform, turned on its side and inspected. No unfavorable distortion or deterioration was observed.

2. Stacking Test

The container was inspected after the 24-hour period was over. No unfavorable distortion or deterioration was observed.

3. Drop Test

After each drop, the container was inspected. The two TALD shapes were completely retained by the container.

REFERENCE MATERIAL

A. Code of Federal Regulations, Title 49 CFR, Parts 107-178.

B. Bureau of Explosives Tariff No. BOE 6000K Hazardous Materials Regulations of the Department of Transportation by Air, Rail, Highway, Water including Specifications for Shipping Containers.

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TEST DATA SHEET

POP MARKING:	
UN 4B1/Y654/S/**/USA/DOD/NAD	
**YEAR LAST PACKED OR MANUFACTURED	
Nomenclature: CNU-536/E Shipping and Storage Container	
Type: 4B1	NSN: TBD
Drawing Number or P/N: 30003-3287AS100	Outer Packaging Material: Aluminum
Dimensions: 111.00" L x 35.00" W x 25.68" H	Gross Weight: 654 kg (1,440 pounds)
Closure (Method/Type): Latches	Tare Weight: 254 kg (560 pounds)
Additional Description:	
PACKAGED COMMODITY:	
Name: See table 1	NSN(s): See table 1
United Nations Number: See table 1	
United Nations Packing Group: II	
Physical State (Solid, Liquid, or Gas): Solid	
Vapor Pressure (Liquids Only): N/A At 50 °C: N/A At 55 °C: N/A	
Consistency/Viscosity: N/A	Density/Specific Gravity: N/A
Amount Per Package: See table 1	Flash Point: N/A
Net Weight: See table 1	
PACKAGED COMMODITY USED FOR TEST:	
Name: Two (2) TALD shapes	Physical State: Solid
Consistency: N/A	Density/Specific Gravity: N/A
Test Pressure (Liquids Only): N/A	Net Weight: 400 kg (880 pounds)
Additional Description:	
The net weight includes the current maximum commodity weight plus an additional 37 kg (80 pounds).	

N/A = Not Applicable

TABLE 1
Commodities Approved for Shipping in the
CNU-536/E Shipping and Storage Container

NALC/ DODIC	NSN	Commodity Nomenclature	Packing Drawing Number	Haz Class/Div	UN Number	Units/ Package	Total Net Weight (lb)	Total Gross Weight (lb)
3W78	1410-01-248-4995	TALD, ADM-141	43-28100	1.4C	0276	2	800	1,360

TALD = Tactical Air Launched Decoy

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
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